

March 25th, 2022

KEY TAKEAWAYS

- The Commonwealth continues to experience rapid declines in COVID-19 case rates and hospitalizations.
- Of the 35 health districts in Virginia, 32 are currently in decline. Slow growth is being reported in the Central Virginia, Roanoke City, and West Piedmont districts, but from low case levels.
- Neighboring states are experiencing similar declines. Southern West Virginia and eastern Kentucky are the only nearby hot spots.
- The CDC's Nowcast estimates the BA.2 subvariant accounts for about 30% of new cases in the region, up from about 20% last week. It is expected to become dominant by mid-April.
- Most European nations have crested the BA.2 surge. However, the subvariant is causing a major surge of hospitalizations in England and Ireland. VDH continues to monitor early-warning systems closely.

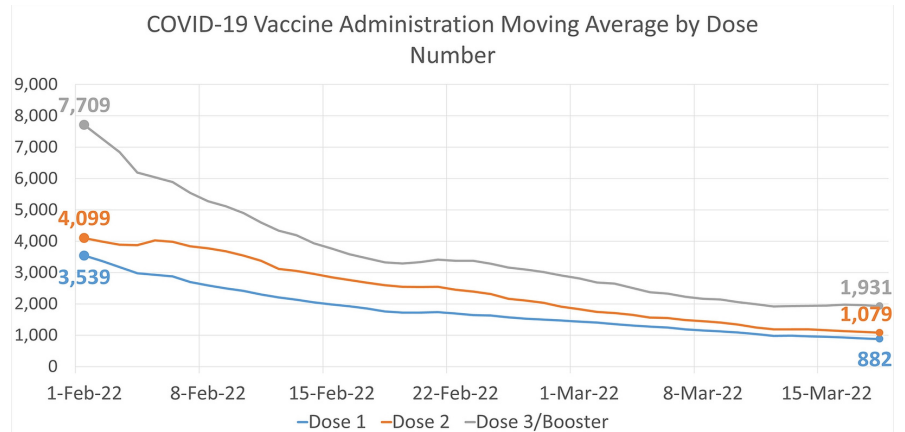
11 per 100kAverage Daily Cases
Week Ending March 21, 2022**(187 per 100k)**Adaptive Scenario
Forecast Average Daily
Cases, **Already Peaked**
on Jan. 16, 2022**882 / 1,079**Average Daily 1st / 2nd Doses
March 18, 2022**1,931**Average Daily Boosters
March 18, 2022

KEY FIGURES

Reproduction Rate
(Based on Confirmation Date)

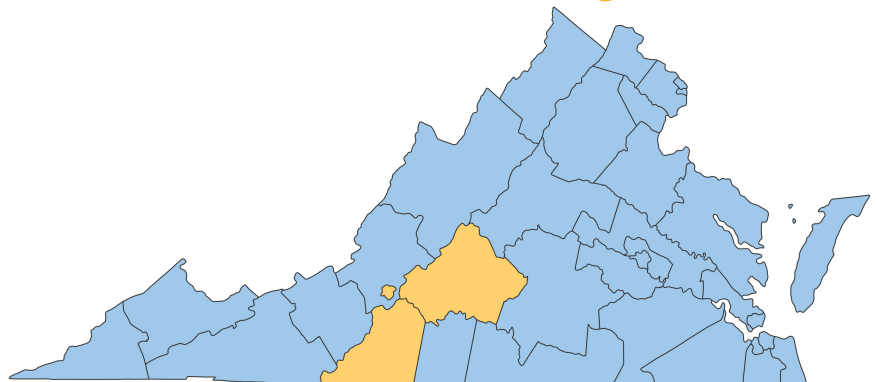
Region	R_e Mar. 22	Weekly Change
Statewide	0.593	-0.155
Central	0.397	-0.456
Eastern	0.436	-0.642
Far SW	0.456	-0.116
Near SW	0.669	0.145
Northern	0.818	-0.020
Northwest	0.656	-0.073

Vaccine Administrations



Growth Trajectories: 0 Health Districts in Surge

Status	# Districts (prev week)
Declining	32 (35)
Plateau	0 (0)
Slow Growth	3 (0)
In Surge	0 (0)



THE MODEL

The UVA COVID-19 Model and these weekly results are provided by the UVA Biocomplexity Institute, which has over 20 years of experience crafting and analyzing infectious disease models. It is a county-level Susceptible, Exposed, Infected, Recovered (SEIR) model designed to evaluate policy options and provide projections of future cases based on the current course of the pandemic. The Institute is also able to model alternative scenarios to estimate the impact of changing health behaviors and state policy.

*COVID-19 is a novel virus,
and the variant mix
changes periodically.
The model improves as
we learn more.*

THE SCENARIOS

Unchanged: The models use various scenarios to explore the path the pandemic is likely to take under differing conditions. As the [CDC now estimates](#) that the Omicron variant represents >99% of all new cases in Virginia, all prior Delta variant scenarios have been retired. All current scenarios are based on the immune escape and transmission profiles of the Omicron variant. As before, models use [COVIDcast](#) surveys to estimate county-level vaccine uptake. They then assume that vaccinations increase steadily in each county until this value is reached and 40% of vaccinated individuals receive a booster.

The new "**Adaptive**" scenario assumes that Omicron is as transmissible as Delta but adds an immune escape of 80%. This represents the current course of the pandemic and assumes that there will be no significant changes in interventions or transmission rates in the near future. Note that this scenario was called "Adaptive-Omicron" until January 21st.

The "Adaptive-Spring" scenario was retired this week. It was meant to study the effect of climate and holiday travel by adjusting transmission rates from December to mid-March to match those of Spring 2021. As we are now beyond the end-date of this scenario, it has been depreciated. The "**Adaptive-DecreaseControl**" scenario explores the effects of a hypothetical increase in transmission rates. It is meant to demonstrate that continuing preventive measures are important despite Omicron's milder illness. The "**Adaptive-VariantBA2**" scenario adjusts for the new Omicron BA.2 subvariant's enhanced transmissibility and assumes it will become dominant in April.

MODEL RESULTS

Unchanged: The current course "**Adaptive**" scenario (blue) projects continued declines in cases, with Virginia reaching fewer than 500 daily cases by the first week of April.

The "**Adaptive-DecreaseControl**" (orange) is similar to Adaptive, but with more uncertainty, including the possibility of a minor hump in the near future. It forecasts an additional 14,000 cases in April and keeps Virginia above 500 daily cases until late May.

The "**Adaptive-VariantBA2**" (maroon) projects an even slower decline with more uncertainty. It keeps Virginia above 500 daily cases until July and suggests the potential for mild growth in May.

Please do your part to drive down cases. [Practice good prevention](#), including indoor masking in public areas, social distancing and self-isolating when sick, and [get vaccinated and boosted](#) as soon as possible.

